

ANNEX B

C22 MODULAR PISTOL PROJECT

STATEMENT OF WORK



Reference Number W8476-216392

Date: 1 February 2021

Prepared by:
DSSPM 9
Technical Authority/Life Cycle Materiel Manager
National Defence Headquarters
Major General George R. Pearkes Building
Ottawa, Ontario
K1A 0K2



NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document shall continue to apply.

Contents

1	SCOPE	4
1.1	Objective	4
1.2	Background.....	4
1.3	Acronyms and Definitions	4
2	APPLICABLE DOCUMENTS	6
2.1	Applicability	6
2.2	Commercially Available Documents	6
2.3	Government Supplied Documents.....	6
3	GENERAL REQUIREMENTS	6
3.1	Overview	6
3.2	Contractor Responsibilities	7
3.3	Production & Deliveries	7
3.4	Government Supplied Material	7
4	PROJECT MANAGEMENT.....	7
4.1	General	7
4.2	Project Master Schedule	7
4.3	Meetings	8
5	SYSTEMS ENGINEERING REQUIREMENTS	8
5.1	Introduction	8
5.2	Identification and Markings	8
5.3	Shipping	9
5.4	Packaging and Labelling	9
5.5	Equipment Environmental Assessment (EEA)	11
5.6	System Acceptance Testing	12
6	INTEGRATED LOGISTIC SUPPORT	12
6.1	General	12
6.2	Technical Publications	12
6.3	Provisioning Parts Breakdown (PPB).....	13
6.4	Supplementary Provisioning Technical Documentation (SPTD).....	13
6.5	Spares Acquisition	13
6.6	Special Tools and Test Equipment (STTE)	13
6.7	Training.....	13
6.8	Factory Authorized Service Agent	14
7	CONFIGURATION MANAGEMENT	14
7.1	General	14
8	QUALITY ASSURANCE	15

8.1	General	15
8.2	Quality Assurance Representative (QAR)	15
8.3	Quality Control Process	15
8.4	Zeroing and Precision Firing.....	15

Related Appendices

Appendix 1	C22 Modular Pistol Project Contract Data Requirements List (CDRL)
Appendix 2	C22 Modular Pistol Project Data Item Descriptions (DID)
Appendix 3	C22 Modular Pistol Project Statement of Work Process Flow Diagram
Appendix 4	C22 Modular Pistol Project System Acceptance Test (SAT)

1	SCOPE
1.1	Objective
1.1.1	The objective of this Statement of Work (SOW) is to describe the tasks and deliverables required of the Contractor by Canada to fulfil the requirements of the C22 Modular Pistol Project (C22 MPP).
1.2	Background
1.2.1	The current service pistol of most of the Canadian Armed Forces (CAF) is the 9mm Browning Hi-Power. The design dates to 1935 and it was procured at the end of the Second World War. The CAF fleet of Browning Hi-Power pistols has deteriorated to the point that it has become unsustainable and too unreliable for operations. The security environment will continue to exhibit high volatility and uncertainty. CAF personnel, when committed to the Contemporary Operating Environment, are assigned operational responsibility over exceptionally large and varied geographical areas. Threats can originate from any direction with little or no warning. CAF personnel require a reliable and effective personal weapon and holster system to deal with constrained close-range situations. The C22 MPP will ensure that CAF personnel have a precise modular pistol and holster system that is reliable and dependable when used by personnel in operational situations from urban areas through dense vegetation to open savannah, arctic and desert under a wide range of climatic conditions.
1.2.2	Figure 1 depicts the items that must be delivered by the C22 MPP.
1.3	Acronyms and Definitions
1.3.1	Acronyms
	ANSI American National Standards Institute
	C22 Designation assigned to the family of Semi-Automatic Pistols being purchased.
	CAF Canadian Armed Forces
	CDRL Contract Data Requirements List
	CFTO Canadian Forces Technical Order
	CM Configuration Management
	CPB Canadian Product Baseline
	DID Data Item Description
	EEA Equipment Environmental Assessment
	EIA Electronic Industries Alliance
	EMS Environmental Management System
	GSM Government Supplied Materials

IAW	In Accordance With
ILS	Integrated Logistics Support
ISO	International Standards Organization
KT	Kit
LS	Logistic Support
MM/YY	Numeric value for month and last two numeric values for year (June 2020 = 06/20)
MPP	Modular Pistol Project
MSP	Munition Supply Partner
NATO	North Atlantic Treaty Organization
NCAGE	NATO Commercial and Government Entity
NCR	National Capital Region
NSN	NATO Stock Number
OEM	Original Equipment Manufacturer
PM	Project Management
PMS	Project Master Schedule
PPB	Provisioning Parts Breakdown
PRM	Project Review Meeting
QA	Quality Assurance
QAR	Quality Assurance Representative
QC	Quality Control
QCI	Quality Control Inspection
RCEME	Royal Canadian Electrical and Mechanical Engineers
RSPL	Recommended Spare Parts List
SAT	System Acceptance Testing
SE	System Engineering
SOW	Statement of Work
SPTD	Supplementary Provisioning Technical Documentation
STTE	Special Tools and Test Equipment
TA	Technical Authority
TDP	Technical Data Package
UOM	Unit Of Measure

1.3.2 Definitions

- 1.3.2.1 “Pistol” is defined as the C22 semi-automatic pistol that is represented by the abbreviation C22.
- 1.3.2.2 “C22 Modular Pistol Project System (C22 MPP System)” is defined as the complete weapon system consisting of items 1 through item 5 as illustrated in Figure 1.

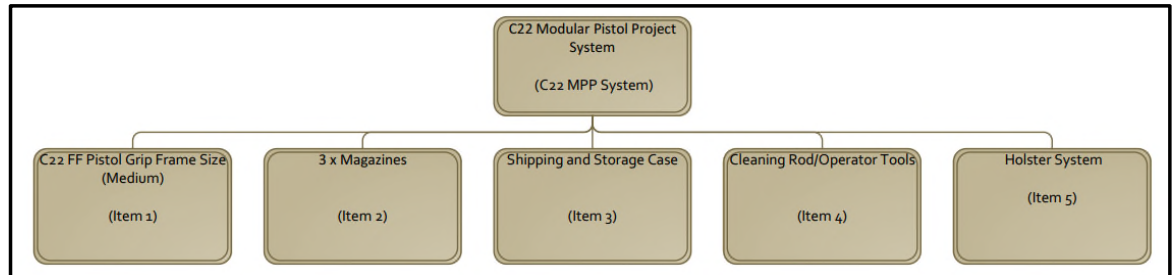


Figure 1: C22 Modular Pistol Project Equipment Breakdown

2 APPLICABLE DOCUMENTS

2.1 Applicability

- 2.1.1 The following documents form part of this specification to the extent specified and are supportive of the specification when referenced; all other document references are to be considered supplemental information only. In the event of a conflict between the documents referenced and the contents of the specification, then the contents of the specification must take precedence.

2.2 Commercially Available Documents

- 2.2.1 ANSI/EIA-649B: National Consensus Standard for Configuration Management; and
- 2.2.2 ISO 9000: Family of Quality Management Standards
- 2.2.3 ISO 9001: Quality Management.
- 2.3 Government Supplied Documents
- 2.3.1 D-01-100-214/SF-000: Specification for Preparation of Provisioning Documentation for Canadian Forces Equipment;
- 2.3.2 D-02-006-008/SG-001: The Design Change Deviation and Waiver Procedure;
- 2.3.3 D-LM-008-002/SF-001: Specification for Marking for Storage and Shipment; and
- 2.3.4 D-LM-008-036/SF-000: Department of National Defence Minimum Requirement for Manufacturer's Standard Pack.

3 GENERAL REQUIREMENTS

3.1 Overview

- 3.1.1 The Contractor must establish, implement and maintain the following capabilities:

- 3.1.1.1 A Project Management (PM) capability that encompasses the C22 MPP PM effort in accordance with (IAW) the work requirements of section 4 of this SOW.
- 3.1.1.2 A Systems Engineering (SE) capability that encompasses the C22 MPP technical effort IAW the work requirements of section 5 of this SOW.
- 3.1.1.3 An Integrated Logistic Support (ILS) capability that encompasses the C22 MPP ILS effort IAW the work requirements of section 6 of this SOW.
- 3.1.1.4 A Configuration Management (CM) capability that encompasses the C22 MPP CM effort IAW the work requirements of section 7 of this SOW.
- 3.1.1.5 A Quality Assurance (QA) capability that encompasses the C22 MPP QA effort IAW the work requirements of section 8 of this SOW.
- 3.2 Contractor Responsibilities
 - 3.2.1 The Contractor must be responsible for meeting all the requirements as identified in the SOW.
 - 3.2.2 Canadian Product Baseline (CPB)
 - 3.2.2.1 The Contractor must follow standard engineering practices to establish a CPB that will be used for the manufacture and delivery of C22 MPP Systems.
 - 3.2.2.2 The CPB must consist of a C22 MPP System that has completed and passed System Acceptance Test (SAT) and meets all mandatory requirements.
- 3.3 Production & Deliveries
 - 3.3.1 The Contractor must develop and establish a production line at its production facilities to manufacture the Pistol IAW Annex C, the Technical and Performance Specification.
 - 3.3.2 The Contractor must produce and deliver the C22 MPP Systems that meet all requirements specified in Annex C, Pistol Technical and Performance Specification and Annex D Holster Technical and Performance Specification IAW the approved Project Master Schedule (PMS).
- 3.4 Government Supplied Material
 - 3.4.1 The Contractor must be responsible for the security and protection of all Government Supplied Material (GSM) which are any items furnished by or on behalf of Canada or acquired by or paid for by Canada which are provided under this Contract. In the event of problems with the GSM, the Contractor must advise Canada immediately, identifying the specific problem.
- 4 PROJECT MANAGEMENT
 - 4.1 General
 - 4.1.1 The Contractor must conduct PM activities IAW industry best practices.
 - 4.2 Project Master Schedule

- 4.2.1 The Contractor must deliver a PMS IAW Contract Data Requirements List (CDRL) 001 and Data Item Description (DID) PM-001.
- 4.3 Meetings
 - 4.3.1 Kick-Off Meeting
 - 4.3.1.1 The Contractor must schedule and chair a kick-off meeting no later than 20 working days following contract award.
 - 4.3.1.2 The Contractor must conduct the kick-off meeting by either video conferencing or a meeting at the Contractor's manufacturing facility where the Pistol will be manufactured at Canada's sole discretion.
 - 4.3.1.3 The Contractor must prepare and submit a Meeting Agenda IAW CDRL 002 and DID PM-002 for the kick-off meeting.
 - 4.3.1.4 The Contractor must prepare and submit Meeting Minutes IAW CDRL 003 and DID PM-003 or Meeting Minutes IAW CDRL 005 and DID PM-005 for the kick-off meeting.
 - 4.3.2 Project Review Meetings
 - 4.3.2.1 The Contractor must schedule and chair up to 18 monthly Project Review Meetings (PRM) with the first meeting occurring no more than 40 working days following contract award.
 - 4.3.2.2 The Contractor must conduct PRMs remotely using video conference services arranged by the Contractor with every third PRM being a face-to-face meeting alternating between the Contractors manufacturing facilities and the National Capital Region (NCR).
 - 4.3.2.3 Canada reserves the right to convert any face-to-face meeting to a Video Conference meeting provide that one-month notice of the change is provided to the Contractor.
 - 4.3.2.4 The Contractor must prepare and submit a Meeting Agenda IAW CDRL 002 and DID PM-002 for each PRM irrespective of location.
 - 4.3.2.5 The Contractor must prepare and submit Meeting Minutes IAW CDRL 003 and DID PM-003 for each PRM held at the OEM Facility.
 - 4.3.2.6 The Contractor must prepare and submit Meeting Minutes IAW CDRL 004 and DID PM-004 for each PRM held in the NCR.
 - 4.3.2.7 The Contractor must prepare and submit Meeting Minutes IAW CDRL 005 and DID PM-005 for each PRM held via Video Conference.
- 5 SYSTEMS ENGINEERING REQUIREMENTS
 - 5.1 Introduction
 - 5.1.1 This section describes the requirements for systems engineering work that the Contractor must carry out under this Contract.
 - 5.2 Identification and Markings
 - 5.2.1 The Contractor must provide an Identification and Marking Presentation IAW CDRL 006 and DID SE-001.

- 5.3 Shipping
- 5.3.1 The Contractor must ship and deliver the C22 MPP System (less item 5) in Figure 1 as a single part number IAW the approved PMS.
- 5.3.2 The Contractor must ship and deliver the Holster System (item 5) in Figure 1 IAW the approved PMS and IAW the following:
- 5.3.2.1 The C22 Holster System must be broken down into the following three components:
- 5.3.2.1.1 Component 1: All Holster components necessary to mount the C22 pistol to the mounting positions described in Annex D paragraphs 3.1.2 and 3.1.3 in Cerakote GEN II Flat Dark Earth (FDE) HIR-265 colour or equivalent approved by the TA.
- 5.3.2.1.2 Component 2: Cerakote GEN II Flat Dark Earth (FDE) HIR-265 colour or equivalent approved by the TA Level 2 Retention holster right hand draw to fit the C22 Full Frame Pistol.
- 5.3.2.1.3 Component 3: Cerakote GEN II Flat Dark Earth (FDE) HIR-265 colour or equivalent approved by the TA Level 2 Retention holster left hand draw to fit the C22 Full Frame Pistol.
- 5.3.3 The Contractor must deliver Holster System Configurations 1 and 2 containing all the components detailed in paragraphs 5.3.2.1 grouped as detailed in Table 1:

	Holster System Configurations	
	1	2
Component 1	X	X
Component 2	X	
Component 3		X

Table 1: Holster System Configurations

- 5.3.4 The Contractor must submit an excel spreadsheet that contains all the Serial Numbers contained in each shipment a minimum of 7 calendar days prior to the Contractor scheduling the shipment for delivery to destination IAW CDRL 024 and DID LS-014.
- 5.4 Packaging and Labelling
- 5.4.1 The exterior side of the Shipping and Storage Carrying Case (Item 3) in Figure 1 containing items 1, 2 and 4 in Figure 1 must have a label applied with the following information:
- Bar coded NATO Stock Number (NSN) (Code 39 or GS1-128);
 - Description;
 - Part Number;
 - NCAGE;

- e. UOM: KT;
- f. Quantity: 1;
- g. Packed: MM/YY;
- h. Contract Number; and
- i. Bar coded Serial Number (Code 39 or GS1-128).

5.4.2

A sample of a label is shown at Figure 2 to allow the Contractor to better understand the label format requirements.



Figure 2: Sample Item Label

5.4.3

C22 Holster System Configurations detailed at Table 1 must be individually packaged in a cardboard box or other package approved by the TA.

5.4.4

The exterior of the package containing the Holster System (Item 5) in Figure 1 must have a label applied with the following information:

- a. Bar coded NATO Stock Number (NSN) (Code 39 or GS1-128);
- b. Description;
- c. Part Number;
- d. NCAGE;
- e. UOM: KT;
- f. Quantity: 1;
- g. Packed: MM/YY; and
- h. Contract Number.

5.4.5

A sample of a label is shown at Figure 3 to allow the Contractor to better understand the label format requirements.



Figure 3 Sample Item Label

- 5.4.6 The labelled Shipping and Storage Carrying Cases (Item 3) in Figure 1 containing items 1, 2 and 4 in Figure 1 must be consolidated into one or more standard tri-wall shipping containers.
- 5.4.7 Each tri-wall container must contain a packing list of serial numbers for all C22's contained in the tri-wall container.
- 5.4.8 The labelled Holster Systems (Item 5) in Figure 1 must be consolidated into one or more standard tri-wall shipping containers
- 5.4.9 The Tri-wall container must be labelled.
- 5.4.10 The label applied to each tri-wall Container must have the following information:
- Bar coded NSN (Code 39 or GS1-128 (UCC/EAN-128));
 - Description;
 - Part Number;
 - NCAGE;
 - Quantity;
 - Packed: MM/YY; and
 - Contract Number.
- 5.4.11 Tri-wall Containers must be palletized and strapped to the pallet with steel banding and edge protectors.
- 5.4.12 Pallet contents must be shrink wrapped.
- 5.4.13 The Contractor must obtain TA approval of all label text/layout prior to any deliveries being made to Canada. Label text will be provided by the TA on completion of cataloguing.
- 5.4.14 The Contractor must obtain TA approval for the location of all label on all items being delivered to Canada prior to any deliveries being made to Canada.
- 5.5 Equipment Environmental Assessment (EEA)

- 5.5.1 The Contractor must prepare and submit an EEA IAW CDRL 008 and DID SE-003.
- 5.5.2 The Contractor must implement and maintain an Environmental Management System (EMS) which is consistent with the principles presented in ISO 14001. Certification to this standard is preferred but not mandatory. The Bidder must, however, have a formalized set of procedures and control measures in place to demonstrate environmental compliance and minimize environmental impact of the work
- 5.6 System Acceptance Testing
 - 5.6.1 The Contractor must perform SAT at their facility IAW Appendix 4 of Annex B no later than 90 days following contract award.
 - 5.6.2 The purpose of SAT is to confirm that the C22 MPP System being delivered fully meet the requirements of the contract.
 - 5.6.3 All SAT activities (or portions thereof) may be witnessed by Canada at Canada's sole discretion.
 - 5.6.4 The Contractor must provide a SAT Report IAW CDRL 009 and DID SE-004.
 - 5.6.5 The Contractor must investigate, at no cost to Canada, all failures and deficiencies during SAT including, but not limited to, reliability and safety related issues.
 - 5.6.6 The Contractor must provide a Failure Investigation Report IAW CDRL 010 and DID SE-005 on the findings of the investigation, with possible recommendations and solutions. All recommendations and solutions proposed by the Contractor must be accepted by Canada. In the event the recommendations and/or solutions proposed by the contractor are not accepted by Canada the contract will be terminated.
 - 5.6.7 On successful completion of SAT and on acceptance of the SAT Report the Contractor will receive authorization to deliver the firm contract quantities of C22 MPP Pistol and Holster Systems to Canada.
- 6 INTEGRATED LOGISTIC SUPPORT
 - 6.1 General
 - 6.1.1 This section describes the requirements for ILS work that the Contractor must carry out under this Contract.
 - 6.1.1.1 ILS related CDRLs must not be delivered until the SAT Report (CDRL 009) has been approved by Canada.
 - 6.2 Technical Publications
 - 6.2.1 Operators Manual Information
 - 6.2.1.1 The Contractor must supply the information IAW with CDRL 011 and DID LS-001 required for Canada to develop a bilingual operator's manual in a Canadian Forces Technical Order (CFTO) format using our Munition Supply Partner (MSP) Colt Canada.

- 6.2.2 Maintenance Manual Information
 - 6.2.2.1 The Contractor must supply the information IAW with CDRL 012 and DID LS-002 required for Canada to develop a bilingual maintenance manual in a CFTO format using our MSP Colt Canada.
- 6.2.3 Data Summary Information
 - 6.2.3.1 The Contractor must supply the information IAW with CDRL 013 and DID LS-003 required for Canada to develop a bilingual data summary manual in a CFTO format using our MSP Colt Canada.
- 6.2.4 Mechanical Diagram Information
 - 6.2.4.1 The Contractor must supply the information IAW with CDRL 014 and DID LS-004 required for Canada to develop a mechanical diagram publication in a CFTO format using our MSP Colt Canada.
- 6.2.5 Illustrated Parts List Information
 - 6.2.5.1 The Contractor must supply the information IAW with CDRL 015 and DID LS-005 required for Canada to develop an illustrated parts list publication in a CFTO format using our MSP Colt Canada.
- 6.2.6 Equipment Description Information
 - 6.2.6.1 The Contractor must supply the information IAW with CDRL 016 and DID LS-006 required for Canada to develop an equipment description publication in a CFTO format using our MSP Colt Canada.
- 6.3 Provisioning Parts Breakdown (PPB)
 - 6.3.1 The Contractor must deliver a PPB IAW CDRL 017 and DID LS-007.
- 6.4 Supplementary Provisioning Technical Documentation (SPTD)
 - 6.4.1 The Contractor must provide SPTD IAW CDRL 018 and DID LS-008.
- 6.5 Spares Acquisition
 - 6.5.1 The Contractor must submit a Recommended Spare Parts List (RSPL) IAW CDRL 019 and DID LS-009.
 - 6.5.2 Provisioning of spares will be negotiated and funded under separate work requests using the DND 626 form for task authorization.
- 6.6 Special Tools and Test Equipment (STTE)
 - 6.6.1 Provisioning of STTE and STTE associated spares will be negotiated and funded under separate work requests using the DND 626 form for task authorization.
- 6.7 Training
 - 6.7.1 Operator Training Package
 - 6.7.1.1 The Contractor must develop and submit an Operator Training Package IAW CDRL 020 and DID LS-010.
 - 6.7.1.2 The Contractor must conduct three Operator Training Course IAW CDRL 022 and DID LS-012 for 15 students each.

- 6.7.1.3 The Contractor must conduct one Operator Training Course in Valcartier Quebec.
- 6.7.1.4 The Contractor must conduct one Operator Training Course in Petawawa Ontario.
- 6.7.1.5 The Contractor must conduct one Operator Training Course in Edmonton Alberta.
- 6.7.2 Maintenance Training Package
 - 6.7.2.1 The Contractor must develop and submit a Maintenance Training Package IAW CDRL 021 and DID LS-011.
 - 6.7.2.2 The Contractor must conduct one Maintenance Training Course IAW CDRL 023 and DID LS-013 for 15 students one of whom will be a Field Service Representative from our MSP Colt Canada.
 - 6.7.2.3 The Contractor must conduct the Maintenance Training Course in Borden Ontario.
- 6.7.3 Equipment for Training
 - 6.7.3.1 Canada will provide the required C22 MPP Pistols and Holster Systems that have been delivered off this contract to support training.
 - 6.7.3.2 The Contractor must provide all other materiel to support training including copies of all approved training materials (one per student), required STTE and spare parts.
- 6.8 Factory Authorized Service Agent
 - 6.8.1 The Contractor must authorize our MSP Colt Canada to act as a Factory Authorized Service Agent for the life of the C22 MPP Pistol where they are authorized to perform all maintenance that could be performed by our military including but not limited to 1st and 2nd line repair and refinishing tasks.
- 7 CONFIGURATION MANAGEMENT
 - 7.1 General
 - 7.1.1 The Contractor must implement and maintain a CM Program complying with the requirements of ANSI/EIA-649B, National Consensus Standard for Configuration Management.
 - 7.1.2 Request for Deviation
 - 7.1.2.1 The Contractor must prepare and deliver Request for Deviations IAW CDRL 025 and DID CM-001 when the Contractor determines, prior to manufacture of C22 Systems, that it is not possible to satisfy the requirements of the Performance Specifications.
 - 7.1.3 Request for Waiver

- 7.1.3.1 The Contractor must prepare and deliver Request For Waivers IAW CDRL 026 and DID CM-002 when the Contractor determines either during or after manufacture of the C22 Systems, that the items do not meet Performance Specifications but are suitable for use “as is” or after rework or retrofit by an approved method.
- 8 QUALITY ASSURANCE
 - 8.1 General
 - 8.1.1 QA Terms and Definitions used herein are IAW International Standards Organization (ISO) 9000-2015.
 - 8.2 Quality Assurance Representative (QAR)
 - 8.2.1 The Contractor must provide the government QAR access to their Quality System within forty-eight (48) hours of receiving a visit request. The Contractor must make available all the supporting documentation.
 - 8.2.2 Government QAR reserves the right to request and witness Factory Quality Control (QC) Test (System and Sub-systems) during the complete production period of the C22 MPP System. 10% of the total quantity of items that will be manufactured and delivered may be called by Government QAR. The QAR will select the C22 MPP Systems from the production being prepared for delivery.
 - 8.2.3 The Contractor must provide corrective measures as requested by the Government QAR and Technical Authority (TA).
 - 8.2.4 The Contractor must consider recommendations from government QAR and TA to address all corrective measures that might have an adverse effect upon the quality of the product. Once the corrective measures are completed and the results are acceptable to Canada, the C22 System will be delivered through the normal process.
 - 8.3 Quality Control Process
 - 8.3.1 The Contractor must implement a QC process to assure and monitor the quality of the C22 System.
 - 8.3.2 Production Quality Conformance Inspection (QCI) must be conducted by the Contractor through a QC process to confirm that production items are built IAW the Performance Specifications of the Contract. Production QC tests confirm that the quality standard is being sustained throughout the Production. The product is inspected for conformance to the technical data.
 - 8.4 Zeroing and Precision Firing
 - 8.4.1 The Contractor must zero each C22 Pistol at 25 m.
 - 8.4.2 The Contractor must fire each zeroed C22 Pistol and achieve the precision requirements in Annex C paragraph 3.16.1.
 - 8.4.3 The Contractor may use alternate ammunition for zeroing and precision with prior approval from the Technical Authority.

- 8.4.4 The Contractor must investigate at no cost to Canada any C22 Pistol that cannot be zeroed or fails to achieve the required precision to determine why the zero or precision is not being achieved.
- 8.4.5 The Contractor must complete repairs following the investigation and perform the zeroing and precision shooting a second time to confirm compliance to the requirements at paragraph 8.4.1 and 8.4.2 at no cost to Canada.
- 8.4.6 The Contractor must not sell to Canada any C22 Pistol that fails to achieve zero or precision after conducting the repairs and subsequent testing detailed in paragraph 8.4.5.
- 8.4.7 The Contractor must retain proof of each C22 Pistols' achieved delivery zeroing and precision results with each C22 Pistol QA documentation.